

July 2, 2014

R307. Environmental Quality, Air Quality.

R307-354. Automotive Refinishing Coatings.

R307-354-1. Purpose.

The purpose of R307-354 is to limit volatile organic compound emissions (VOC) from automotive refinishing sources.

R307-354-2. Applicability.

(1) R307-354 applies to sources located in Box Elder, Cache, Davis, Salt Lake, Tooele, Utah and Weber counties that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.

~~[(2) In Box Elder and Tooele counties, R307-354 applies to the following sources:~~

~~—(a) Existing sources as of February 1, 2013 with the potential to emit 5 tons per year or more of VOC, including related cleaning activities; and~~

~~—(b) New sources as of February 1, 2013 that have the potential to emit 2.7 tons per year or more of VOC, including related cleaning activities.]~~

[[3]2) The requirements of R307-354 shall not apply to any canned aerosol coating products.

R307-354-3. Definitions.

The following additional definitions apply to R307-354:

"Adhesion promoter" means a coating which is labeled and formulated to be applied to uncoated plastic surfaces to facilitate bonding of subsequent coatings, and on which, a subsequent coating is applied.

"Automotive" means passenger cars, vans, motorcycles, trucks, buses, golf carts and all other mobile equipment.

"Automotive refinishing" means the process of coating automobiles, after-market automobiles, motorcycles, light and medium-duty trucks and vans that are performed in auto body shops, auto repair shops, production paint shops, new car dealer repair and paint shops, fleet operation repair and paint shops, and any other facility which coats vehicles under the Standard Industrial Classification Code 7532 (Top, Body and Upholstery Repair Shops and Paint Shops). This includes dealer repair of vehicles damaged in transit. It does not include refinishing operations for other types of mobile equipment, such as farm machinery and construction equipment or their parts, including partial body collision repairs, that is subsequent to the original coating applied at an automobile original equipment manufacturing plant.

"Clear coating" means any coating that contains no pigments and is labeled and formulated for application over a color coating or clear coating.

"Coating" means a protective, decorative, or functional material applied in a thin layer to a surface. Such materials may include paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, inks, and temporary protective coatings.

"Color coating" means any pigmented coating, excluding adhesion promoters, primers, and multi-color coatings, that requires a subsequent clear coating and which is applied over a primer, adhesion

July 2, 2014

promoter, or color coating. Color coatings include metallic and iridescent color coatings.

"Enclosed paint gun cleaner" means a cleaner consisting of a closed container with a door or top that can be opened and closed and fitted with cleaning connections. The spray gun is attached to a connection, and solvent is pumped through the gun and onto the exterior of the gun. Cleaning solvent falls back into the cleaner's solvent reservoir for recirculation.

"Metallic/Iridescent color coating" means a coating which contains iridescent particles, composed of either metal as metallic particles or silicon as mica particles, in excess of 0.042 pounds per gallon as applied, where such particles are visible in the dried film.

"Multi-color coating" means a coating which exhibits more than one color when applied, and which is packaged in a single container and applied in a single coat.

"Non-enclosed paint gun cleaner" means cleaner consisting of a basin similar to a sink in which the operator washes the outside of the gun under a solvent stream. The gun cup is filled with recirculated solvent, the gun tip is placed into a canister attached to the basin, and suction draws the solvent from the cup through the gun. The solvent gravitates to the bottom of the basin and drains through a small hole to a reservoir that supplies solvent to the recirculation pump.

"Pretreatment coating" means a coating which contains no more than 16% solids, by weight, and at least 0.5% acid, by weight, is used to provide surface etching, and is applied directly to bare metal surfaces to provide corrosion resistance and promote adhesion for subsequent coatings.

"Primer" means any coating which is labeled and formulated for application to a substrate to provide a bond between the substrate and subsequent coats; corrosion resistance; a smooth substrate surface; or resistance to penetration of subsequent coats, and on which a subsequent coating is applied. Primers may be pigmented.

"Single-stage coating" means any pigmented coating, excluding primers and multi-color coatings, labeled and formulated for application without a subsequent clear coat. Single-stage coatings include single-stage metallic/iridescent coatings.

"Solids" means the part of the coating that remains after the coating is dried or cured; solids content is determined using data from EPA Method 24.

"Temporary protective coating" means any coating which is labeled and formulated for the purpose of temporarily protecting areas from overspray or mechanical damage.

"Topcoat" means any coating or series of coatings applied over a primer or an existing finish for the purpose of protection or beautification.

"Truck bed liner coating" means any coating, excluding clear, color, multi-color, and single-stage coatings, labeled and formulated for application to a truck bed to protect it from surface abrasion.

"Underbody coating" means any coating labeled and formulated for application to wheel wells, the inside of door panels or fenders, the underside of a trunk or hood, or the underside of the motor vehicle.

July 2, 2014

"Uniform finish coating" means any coating labeled and formulated for application to the area around a spot repair for the purpose of blending a repaired area's color or clear coat to match the appearance of an adjacent area's existing coating. Prior to May 1, 2013, this coating category may be referred to as uniform finish blenders.

"Uniform finish blender" means a coating designed to blend a repaired topcoat into an existing topcoat.

R307-354-4. ~~[Emission Standards]~~VOC Content Limits.

Each owner or operator shall not apply coatings with a VOC content in excess of the amounts specified in Table 1 or shall use an add-on control device as specified in R307-354-6.

TABLE 1

AUTOMOTIVE REFINISHING VOC LIMITS

(values in pounds of VOC per gallon of coating, minus water and exempt solvent (compounds not defined as VOC), as applied)

COATING CATEGORY <u>LIMITS</u>	VOC [EMISSION RATES] <u>CONTENT</u>
Adhesion Promoter	4.5
Clear Coating	2.1
Color Coating	3.5
Multi-color Coating	5.7
Pretreatment Coating	5.5
Primer	2.1
Primer Sealer	2.1
Single-stage Coating	2.8
Temporary Protective Coating	0.5
Truck Bed Liner Coating	2.6
Underbody Coating	3.6
Uniform Finish Coating	4.5
Any Other Coating Type	2.1

R307-354-5. Work Practice and Recordkeeping.

(1) Control techniques and work practices are to be implemented at all times to reduce VOC emissions~~[from fugitive type sources]~~.

Control techniques and work practices include:

- (a) Tight fitting covers for open tanks;

July 2, 2014

- (b) Covered containers for solvent wiping cloths;
 - (c) Collection hoods for areas where solvent is used for cleanup;
 - (d) Minimizing spill of VOC-containing cleaning materials;
 - (e) Conveying VOC-containing materials from one location to another in closed containers or pipes; and
 - (f) Cleaning spray guns in enclosed systems or a non-enclosed paint gun cleaner may be used if the vapor pressure of the cleaning solvent is less than 100 mm Hg at 68 degrees Fahrenheit and the solvent is directed towards a drain that leads directly to an enclosed remote reservoir.
- (2) Application equipment requirements:
- (a) A person shall not apply any coating to an automotive part or component unless the coating application method achieves a demonstrated 65% transfer efficiency.
 - (b) The following coating application methods have been demonstrated to achieve a minimum of 65% transfer efficiency:
 - (i) Brush, dip or roll coating operated in accordance with the manufacturers specifications;
 - (ii) Electrostatic application equipment operated in accordance with the manufacturers specifications; and
 - (iii) High Volume, Low Pressure spray equipment operated in accordance with the manufacturers specifications.
 - (c) Other coating application methods may be used that have been demonstrated to be capable of achieving at least 65% transfer efficiency, as certified by the manufacturer.
- (3) All sources subject to R307-354 shall maintain records demonstrating compliance with~~[-all provisions of]~~ R307-354-4 and R307-354-5~~[-on an annual basis]~~.
- (a) Records shall include, but not be limited to, inventory and product data sheets of all coatings and solvents subject to R307-354.
 - (b) These records shall be available to the director upon request.

R307-354-6. ~~[Optional]~~Add-On Control[s] Systems Operations.

~~[(1) The owner or operator may install and maintain an incinerator, carbon adsorption, or any other add-on emission control device, provided that the emission control device will attain at least 90% efficiency performance.]~~

~~[(2) The owner or operator of a control device shall provide documentation that the emission control system will attain the requirements of R307-354-6.]~~

~~[(3) Emission control systems shall be operated and maintained in accordance with the manufacturer recommendations. The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.]~~

(1) The owner or operator shall install and maintain an incinerator, carbon adsorption, or any other add-on emission control system, provided that the emission control system is operated and maintained in accordance with the manufacturer recommendations in

July 2, 2014

order to maintain at least 90% capture and control efficiency. Determination of overall capture and control efficiency shall be determined using EPA approved methods, as follows.

(a) The capture efficiency of a VOC emission control system's VOC collection device shall be determined according to EPA's "Guidelines for Determining Capture Efficiency," January 9, 1995 and 40 CFR Part 51, Appendix M, Methods 204-204F, as applicable.

(b) The control efficiency of a VOC emission control system's VOC control device shall be determined using test methods in Appendices A-1, A-6, and A-7 to 40 CFR Part 60, for measuring flow rates, total gaseous organic concentrations, or emissions of exempt compounds, as applicable.

(c) An alternative test method may be substituted for the preceding test methods after review and approval by the EPA Administrator.

(2) The owner or operator of a control system shall provide documentation that the emission control system will attain the requirements of R307-354-6(1).

(3) The owner or operator shall maintain records of key system parameters necessary to ensure compliance with R307-354-6. Key system parameters may include, but are not limited to, temperature, pressure and flow rates. Operator inspection schedule, monitoring, recordkeeping, and key parameters shall be in accordance with the manufacturer's recommendations, and as required to demonstrate operations are providing continuous emission reduction from the source during all periods that the operations cause emissions from the source.

(4) The owner or operator shall maintain for a minimum of two years records of operating and maintenance sufficient to demonstrate that the equipment is being operated and maintained in accordance with the manufacturer recommendations.

[R307-354-7. Compliance Schedule.]

All sources within Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber counties shall be in compliance with this rule by July 1, 2014.]

KEY: air pollution, automotive refinishing, VOC, coatings

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